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ABSTRACT

The effects of failing to pass a high school exit exam were examined for the Georgia Basic Skills Test (GBST). Data were collected on a random sample of students who were tenth graders in 1983 and in 1984. The following issues were studied: (1) impact of failure on self esteem, as measured by the Piers-Harris Children's Self-Concept Scale (P-H); (2) optimal number of trials needed to pass the exit exam; and (3) characteristics which distinguished passers from non-passers. Data were also collected for seniors who passed the competency test and graduated in 1985 and 1986. The P-H was administered before the GBST, immediately after, and two months after receiving scores. Results showed that over 70 percent of the students passed both sections of the exit exam on the first test administration, even though six or more opportunities were provided. For one of the years studied, students' self-concept was influenced by knowledge of passing status after the first test administration. Initial self-concept was also significant. Self-concept, grade point average, and normal curve equivalent scores on the GBST predicted passing status, using discriminant analysis. Since a smaller number of students failed the GBST during the second year, further research on this situation was suggested. (GDC)

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MINIMUM COMPETENCY TESTING: AN ANALYSIS OF STUDENT OUTCOMES FOR THOSE NOT MASTERING MANDATED TESTING STANDARDS

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MINIMUM COMPETENCY TESTING: AN ANALYSIS OF STUDENT OUTCOMES FOR THOSE NOT MASTERING MANDATED TESTING STANDARDS

INTRODUCTION

June 1985 marked a critical turning point for public education in Georgia. The Class of 1985 represented the state's first high school graduates mandated to pass minimum competency tests in reading and mathematics as a graduation requirement. The close of the 1985 academic year also marked the last term in which third graders throughout the state will be promoted based upon local criteria. Starting with the 1985-86 school year, the state will use minimum competency testing (MCT) as a basis for third-grade promotion as well.

Changes in educational practices within the State of Georgia are merely a microcosm of the reform movement in American education. In 1984, 40 states were actively involved in some aspect of MCT; 19 states were using test performance as a basis for high school graduation; while 5 states were using testing as a basis for grade promotion (Anderson and Pipho, 1984). Such encroachments by state government in the heretofore "sacred environs" of local control of education has been characterized by Siegel (1983) as examples of the efforts of state legislators to wrest educational control from local school systems.

The upsurge in state-mandated testing is occurring in response to the public's demand for higher educational standards and more rigorous verification of students' competencies. The era of social promotion has ended, and has been replaced instead by the current cries for educational excellence. According to Clarke and Thompson (1966), competency tests should be utilized to insure that students lacking in a skill area are provided instruction designed to insure that they attain the lacking skills. Competency tests then should be mechanisms for inclusion rather than exclusion (Conaway, 1977). Yet, as Toch (1984) stated:

> If the U. S. fails to insure that the excellence movement reaches every student, the current calls for school reform may do nothing more than widen the gulf between the educational haves and have-nots, leaving those citizens who lack adequate training increasingly less able to manage in an increasingly complicated world (p. 176).

Georgia's MCT program went into effect at the beginning of the 1982-83 academic year. By action of the State Board of Education, all students who entered the ninth grade during the 1981-82 school year and thereafter or who entered the ninth grade prior to the 1981-82 school year but who dropped out of school and re-enrolled after February 25, 1985, are bound by the new high school graduation requirements.

The Georgia exit exam, commonly called the Georgia Basic Skills Tests (GBST), is a criterion-referenced test designed to assess competency on designated minimum reading and mathematics skills. In order to receive a high school diploma, students bound by the policy must pass both skill areas of the GBST (i.e., reading and mathematics), in addition to fulfilling the regular graduation requirements. The test is initially administered during the fall of a student's tenth-grade year. Students failing the initial administration are retested in the spring as well as the subsequent fall and spring of their eleventh- and twelfth-grade years. Thus, each student receives six opportunities to pass the test prior to the time for his/her class to graduate. Students who are unable to pass the GBST by the spring of their twelfth-grade year receive a certificate of attendance rather than a high school diploma. Though coming into the forefront only a few years ago, exit exams now play a vital role in students' lives. There is, however, little information available concerning the psychological impact that exit exams have on students who fail to overcome this particular life hurdle.

The exit exam, in all probability, is most likely to have an impact on that part of the human psyche identified as the self-concept. Interest in the examination of the self was initiated by James (1890) who determined that the self was comprised of three parts — the material, social, and maternal self. Symonds (1951) views the self as comprised of four parts that refer to the body, mind, and bodily processes as they are observed and reacted to by the individual. Jersild (1952) conceptualizes the self as a summation of all of a person's experiences. Nobles (1973) presents a view that the Black self-concept is based upon group identity which is determined by the African concept of

self. Shavelson, Hubner, and Stanton (1976) describe the self-concept as a multifaceted hierarchal construct. Each researcher cited defines the self by using differing terminology; however, each denotes that the self is based upon the attitudes or beliefs an individual develops about his/her attributes. Thus, as a result of evaluative interactions, a person's self-concept is either positive or negative. One evaluative interaction having the potential for a lasting impact on an adolescent's self-concept is the high school exit exam.

Three hypotheses concerning the self-concept are examined by Brookover et. al. (1964). They find that self-concept of ability is significantly and positively related to academic performance, that it is differentiated into specific sub-areas which are better predictors of achievement than general self-concept, and that it is positively related to the perceived evaluations of significant others. Similar findings have been reported by Shavelson et. al. (1976). Wattenberg and Clifford (1964) discern that self-concept is a better predictor of achievement than intelligence tests. Further, they find that self-concept is more closely associated with achievement in older children than in younger children. Similar findings are revealed by Paschal (1968) and Caplan (1969). Zarb (1981) finds that the academic self-concept is a significant predictor of grade point averages. Additional studies have also revealed a positive relationship between self-concept and achievement (Piers and Harris, 1964; Green and Farguhar, 1972; McCandles, 1967; Davidson and Greenberg, 1967; Glasser, 1969; and Song and Hattie, 1984). Thus, the literature shows that a student's self-concept is closely related to achievement and is comprised of parts which together form the total self-concept.

The goal of the MCT movement, according to Wise (1978), is to solve the problem of low academic achievement through legislated policy. Anderson and Pipho (1984) note that MCT primarily affects low-achieving students, while having little or no affect upon high-achieving students. Toch (1984) indicates that although the intention of the National Commission on Excellence in Education was to make American schools more demanding, "since 1981 the Reagan Administration has removed 500,000 students from federal

programs designed to aid the underprivileged" (p. 176). This action cited by Toch underscores the educational paradox faced by the public schools resulting from implementation of the MCT, that being the leveling impact that universal education has had on measures of educational achievement (Christie and Casey, 1983).

This study is designed to identify those critical factors which describe the members of the Class of 1985 and Class of 1986 bound by the MCT policy, but who are not identified as being bilingual or educationally handicapped. Additionally, this study re-examines those previous findings which indicate a significant relationship between students' self-concept and their passing status on the state high school exit exam. Questions such as the following will be examined:

1. What is the optimum number of times needed to pass the high school exit exam, especially by initial non-passers?
2. Does failing the state exit exam have an impact upon students' self-concept, particularly the self-concept of those who repeatedly fail?
3. Can findings obtained from randomly selected 1983 tenth graders be replicated with a randomly selected sample of 1984 tenth graders?
4. Are there characteristics which distinguish between initial passers and initial non-passers that can be identified?

The current study began in 1983-84, the second year the state's MCT policy went into effect, and has been conducted over a three-year period. The first two years were devoted primarily to data collection, with the third year reserved for data analysis. The primary goal of the study was to examine the impact of repeated failure of the state's high school exit exam upon initial non-passers. There was a special interest in determining if findings for Year 1 could be replicated with a new randomly selected group of tenth graders for Year 2.

METHODOLOGY

Sample

The current study was based upon data collected for three groups of students: Two randomly selected groups of tenth graders, and the members of the 1985 and 1986 Atlanta Public Schools (APS) senior classes who were covered by the state's MCT graduation policy and had passed the graduation competency test prior to graduation. A listing of the groups studied and the data collection points appear below:

TABLE 1

SELF-CONCEPT SCALE ADMINISTRATION AND GENERAL DATA COLLECTION

Year 1 (1983-84 Data Collection) Class of 1986	Year 2 (1984-85 Data Collection) Class of 1987	Year 3 (1985-86 Data Collection) Classes of 1985 and 1986
(Random sample of tenth-grade students selected prior to graduation MCT) Self-concept test administration:	(Random sample of tenth-grade students selected prior to graduation MCT) Self-concept test administration:	(Population of twelfth-grade students covered by state MCT policy)
A. September 1983 (prior to fall BST administration)	A. September 1984 (prior to fall BST administration)	Descriptive profiles constructed for 1985 and 1986 seniors covered by state MCT policy and passing tests prior to graduation
B. December 1983 (immediately upon receiving fall test results)	B. December 1984 (immediately upon receiving fall test results)	
C. February 1984 (validation of December results)	C. February 1985 (prior to spring BST administration)	

All tenth-grade students within the two samples were first-time takers of the GBST at the beginning of either the 1983-84 or 1984-85 school terms. These two groups were of special interest because they were members of the second and third graduating classes bound by the state's high school exit exam. Special education and bilingual students,

though also bound by the state's graduation policy, were excluded from the two samples since they each represented a special population. The actual population or sample sizes will be identified in conjunction with the specific analysis used.

Procedure

Data utilized in this study were gathered over a two-year period on members of the APS high school classes of 1985, 1986, and 1987. Approximately two to three weeks before the fall 1983 and fall 1984 administrations of the GBST, APS counselors for those tenth-grade members of the Class of 1986 and the Class of 1987 were requested to coordinate the administration of the Piers-Harris Children's Self-Concept Scale (P-H) to sample students in each APS high school. The counselors were given the option of administering the self-concept scale personally or enlisting the assistance of language arts teachers to whom the students were assigned. If the latter option was adopted, the self-concept scale was administered during the regular language arts class period. In either instance, the self-concept scale was administered in one 50-minute class period.

Schools were requested to complete the administration of the self-concept scale within a designated one-week period. Guidelines for administering the scale were provided for each school in appropriate quantities, along with a sample test item and instructions for students, test booklets, and preprinted computer answer sheets. The guidelines for administering the scale and the sample test item and instructions for students were designed to facilitate the uniformity of the testing procedures across the various school sites.

The P-H was selected specifically because of its high reliability in measuring self-concept as a total construct ($r = .80$), its appropriateness for analyzing various subcomponents of self-concept, and its ease of administration. In addition to a total score, the self-concept scale also provides subscale scores in the following six domains: (1) behavior, (2) intellectual and school status, (3) physical appearances and attributes, (4) anxiety, (5) popularity, and (6) happiness and satisfaction. Students' performance on

the total scale, as well as the intellectual and school status subscale measuring academic self-concept, were of special interest, given the objectives of the study.

The self-concept scale was administered to the two samples of tenth-grade students at three strategic points in time during the 1983-84 and 1984-85 school years as indicated by Table 1: (1) before they were initially administered the state exit exam, which was considered a neutral period; (2) immediately after students received the fall 1983 results, which was considered a high-anxiety period for students who failed either one or both portions of the tests; and (3) two months after receipt of the exit-exam results.

The third administration of the self-concept scale, which was scheduled for the month of February, was viewed as a checkpoint for validating the initial posttest results. There was an interest in knowing whether students' immediate reactions as reflected by self-concept scores were temporary or sustained.

Research Questions

This study was conceived as an exploratory project to answer the following questions regarding the state high school exit exam:

1. What is the optimum number of times needed to pass the reading and mathematics subtests of the state high school exit exam of the six or more opportunities provided for students during the tenth through the twelfth grades? (Both subtests must be passed in order to receive a diploma.)
2. What impact does failing the state high school exit exam have upon students' self-concept, as reflected by findings for Year 1 and Year 2?
3. Is it possible to identify critical factors which distinguish between passers and non-passers?

For purposes of this study, passers were those students who passed both skill areas on the initial administration of the BST; and non-passers are those students who failed to pass either one or both of the skill areas on the initial administration. Passing status for purposes of this study is operationalized to mean: (1) those who initially passed neither skill areas, (2) those who initially failed one skill area, and (3) those who initially passed both skill areas.

FINDINGS

Question 1: What is the optimum number of times needed to pass the state exit exam of the six or more opportunities provided?

In order to answer Question 1, a descriptive profile was made of the population of 1985 seniors covered by the state MCT policy. These students were the first graduating class required to pass the state exit exam. Of the 3,589 seniors covered by the state MCT policy, 3,512 (or 98 percent) had passed the state high school exit exam in reading, and 3,504 (or 98 percent) had passed the high school exit exam in mathematics by the end of their senior year. A similar profile was constructed for 1986 seniors, based upon the number of students covered by the policy who have passed the high school exit exam to date. Of the 3,769 seniors in the Class of 1986 covered by the state MCT policy, 3,614 (or 96 percent) have passed the high school exit exam in reading to date, and 3,598 (or 95 percent) have passed the high school exit exam in mathematics to date. (Data for the last test administration for 1986 seniors are not yet available.)

To determine the optimum number of times needed to pass the state exit exam, frequency distributions were constructed of the number and percentage of 1985 and 1986 seniors covered by the state policy who had passed the high school exit exam by either the end (Class of 1985) or middle (Class of 1986) of their senior year. Based upon these data, over 70 percent of the students in both groups passed the state high school exit exam on the first test administration in reading and mathematics. (See Tables 2 and 3.)

TABLE 2

FREQUENCY DISTRIBUTION OF TEST ADMINISTRATIONS NEEDED TO PASS TO PASS STATE GRADUATION COMPETENCY TESTS FOR POPULATION OF 1985 SENIORS COVERED BY POLICY

READING

(N = 3,512)

Test Administration	*Seniors Covered by Policy: Grade When Tested	Number Passing	Percent Passing	Cumulative Percent Passing
1	10	3,147	89.6	89.6
2	10	215	6.1	95.7
3	11	52	1.5	97.2
4	11	53	1.5	98.7
5	12	24	0.7	99.4
6	12	21	0.6	100.0

MATHEMATICS

(N = 3,504)

Test Administration	*Seniors Covered by Policy: Grade When Tested	Number Passing	Percent Passing	Cumulative Percent Passing
1	10	2,703	77.1	77.1
2	10	430	12.3	89.4
3	11	137	3.9	93.3
4	11	158	4.5	97.8
5	12	38	1.1	98.9
6	12	38	1.1	100.0

*Note: Data for seniors covered by policy who passed state graduation competency tests by end of senior year.

TABLE 3

FREQUENCY DISTRIBUTION OF TEST ADMINISTRATIONS NEEDED TO PASS STATE GRADUATION COMPETENCY TESTS FOR POPULATION OF 1986 SENIORS COVERED BY POLICY

READING

(N = 3,614)

Test Administration	*Seniors Covered by Policy		
	Number Passing	Percent Passing	Cumulative Percent Passing
1	3,127	86.5	86.5
2	329	9.1	95.6
3	58	1.6	97.2
4	65	1.8	99.0
5	31	0.9	99.9
6	4	0.1	100.0

MATHEMATICS

(N = 3,598)

Test Administration	*Seniors Covered by Policy		
	Number Passing	Percent Passing	Cumulative Percent Passing
1	2,651	73.7	73.7
2	652	18.1	91.8
3	126	3.5	95.3
4	97	2.7	98.0
5	67	1.9	99.9
6	1	0.0	99.9
7	4	0.1	100.0

*Note: 1. Data for seniors covered by policy who passed state grduation competency tests by middle of senior year. End-of-year data not yet available.

2. Ninth graders with 52 credit hours also eligible for testing during second year of policy; thus, more than six test administrations are possible prior to graduation.

Of the initial non-passers in both populations of students covered by the state MCT policy and passing the high school exit exam by either the middle or end of their senior year, the optimum number of test administrations was two. For the Class of 1985, 58.9 percent of the 365 students who failed the high school exit exam in reading on the first test administration passed the reading subtest on the second test administration. Of the 801 target students in the Class of 1985 who failed the high school exit exam in mathematics on the first test administration, 54 percent passed on the second test administration. For the Class of 1986 (the current seniors), 69 percent of the 587 initial non-passers in reading passed the exit exam on the second test administration, while 68.8 percent of the 947 initial non-passers in mathematics passed on the second test administration.

Question 2: What impact does failing the state high school exit exam have on students' self-concept, especially those who fail repeatedly?

Year 1 (1983-84):

Of the 248 randomly selected tenth graders for whom initial self-concept scores were obtained prior to their first administration of the state exit exam, self-concept scores on posttest 1 (i.e., after receiving November test results) were obtained for 146 students. Self-concept scores for all three data points (the pretest, posttest 1, and posttest 2) were obtained for 129 students. Four two-way analyses of variances (ANOVA) were used to examine the relationship between passing status after the first test administration of the high school exit exam and students' self-concept. Initial self-concept and passing status were the two independent variables. The respective dependent variables examined successively were (1) total self-concept scores, (2) the academic self-concept subscale scores, (3) changes in total self-concept scores between posttest 1 and posttest 2, and (4) changes in academic self-concept scores between posttest 1 and posttest 2.

In order to control for students' initial self-concept prior to taking the state exit exam, total self-concept scores obtained prior to the first administration of the exam

were used to categorize the sample of tenth graders in Year 1 as either high self-concept students or low self-concept students. The median total score on the pretest administration of the self-concept scale was 67.57 out of a possible score of 80. Students having total self-concept scores in September which were at or above the median total score for the sample were categorized as high self-concept students. Those having total self-concept scores which were below the median for the sample were categorized as low self-concept students.

The second independent variable, passing status, was based upon students' initial performance on the exit exam. As noted previously, the exit exam is comprised of two skill areas: reading and mathematics. Thus, three levels of passing status were established: (1) students' passing both the reading and mathematics skill areas, (2) those failing one skill area, and (3) those failing both skill areas. Students in groups 2 and 3 are considered non-passers according to the state's policy.

A significant main effect was found for passing status after the first administration of the high school exit exam in the following instances: (1) when total self-concept scores on posttest 1 were used as a dependent variable ($F=5.92$, $df=2,140$, p .01); (2) when the changes in total self-concept scores between posttest 1 and posttest 2 were used as a dependent variable ($F=3.74$, $df=2,123$, p .05), and (3) when changes in academic self-concept scores between posttest 1 and posttest 2 were used as a dependent variable ($F=5.19$, $df=2,123$, p .01).

When academic self-concept scores on posttest 1 were used as a dependent variable, a significant interaction was found between initial self-concept and passing status ($F=3.42$, $df=2,140$, p .05). Thus, no conclusions were drawn regarding the main effect of passing status and students' self-concept following the receipt of their exit exam test results. An examination of the cell means revealed that the academic self-concept on posttest 1 for high self-esteem students failing one of the two skill areas was most similar to high self-esteem students passing both sections of the state exit exam. The academic

self-concept on posttest 1 of low self-esteem students who failed one of the two skill areas was most similar to the low self-esteem students who failed both sections of the exit exam.

The Year 1 findings led to the conclusion that students' total self-concept, as well as changes in their total and academic self-concept between posttest 1 and posttest 2, were influenced by knowledge of their passing status on the state exit exam after the first test administration. Areas of particular interest for further examination included the following: (1) a follow-up comparison using Tukey-HSD procedure (Year 1 data shown in Table 4 indicates that the mean total self-concept score on posttest 1 for students who passed both skill areas on the first attempt was significantly higher ($p < .05$) than that of students who failed either one or both skill areas); (2) the significant interaction found between initial self-concept and passing status, and particularly the interaction found for students who failed one of the two skill areas (see Table 5); and (3) a follow-up comparison using Tukey-HSD procedure to examine the mean change in both total and academic self-concept for students who failed both skill areas on the initial test administration (see Tables 6 and 7).

TABLE 4

TOTAL SELF-CONCEPT SCORES OF FIRST-TIME EXAM TAKERS
UPON IMMEDIATE RECEIPT OF EXIT EXAM RESULTS
YEAR 1

Passing Status	N	Mean Self-Concept	SD
Passed both sections	86	69.07*	10.58
Failed one section	39	64.21	12.73
Failed both sections	21	58.57	14.82
Total	146	66.26	12.36

*$p < .05$

TABLE 5

ACADEMIC SELF-CONCEPT SCORES OF FIRST-TIME EXAM TAKERS
UPON IMMEDIATE RECEIPT OF EXIT EXAM RESULTS
YEAR 1

Group	N	Mean Academic Self-Concept		
		Passed Both	Failed One	Failed Both
High self-esteem	75	15.75	15.20	12.00
Low self-esteem	71	12.95	10.42	10.50

(Note: Minimum score = 5; maximum score = 17)

TABLE 6

MEAN CHANGE IN TOTAL SELF-CONCEPT SCORES
OVER TWO-MONTH PERIOD
YEAR 1

Passing Status	N	Mean Change	SD
Passed both sections	78	-.54	10.30
Failed one section	32	2.78	12.16
Failed both sections	19	7.05*	10.50
Total	129	1.40	10.82

*p .05

TABLE 7

MEAN CHANGE IN ACADEMIC SELF-CONCEPT
SCORES OVER TWO-MONTH PERIOD
YEAR 1

Passing Status	N	Mean Change	SD
Passed both sections	78	-.17	2.45
Failed one section	32	.84	2.49
Failed both sections	19	1.84*	2.67
Total	129	.38	2.58

*p .05

Year 2 (1984-85):

The findings for Year 1 were generally not replicated in Year 2, using two-way ANOVA's to examine the relationship between students' passing status on the first administration of the state exit exam and their self-concept scores after receiving the initial test results. The data collection procedures used in Year 1 were again used in Year 2. Pretest and posttest self-concept scores were obtained for 204 randomly selected tenth graders. The median pretest total self-concept score used to dichotomize the sample into high and low self-concept students was 68.

In contrast to Year 2, the only instance in which a significant main effect was found for passing status was with respect to changes in academic self-concept between the posttest 1 and posttest 2 ($F=3.47$, $df=2,197$, p .05). In contrast to previous findings, there was a decline, rather than an increase, in the mean change in academic self-concept scores for students who failed either one or both skill areas in Year 2. A follow-up comparison indicated that there was not a significant difference between the three groups at the .05 level (see Table 8).

TABLE 8

MEAN CHANGE IN ACADEMIC SELF-CONCEPT
SCORES OVER TWO-MONTH PERIOD
YEAR 2

Passing Status	N	Mean Change	SD
Passed both sections	167	.34	1.62
Failed one section	21	-.33	2.24
Failed both sections	15	-.67	2.99
Total	203	.19	1.83

Note: One case missing

Data for Year 1 and Year 2 were subsequently analyzed using multiple regression. For each of the two random samples of tenth graders, two regression equations were established to examine the extent to which total and academic self-concept after receiving exit exam test results could be predicted from four predictor variables: (1) initial self-concept prior to the first administrator of the state exit exam; (2) grade-point average for the previous school year; (3) composite norm-referenced test scores for the previous year; and (4) passing status after the first administration of the state exit exam. A stepwise procedure was used to include variables into the equation. There were 136 cases analyzed for Year 1 and 192 cases analyzed for Year 2.

For the Year 1 sample of tenth graders, initial self-concept and composite norm-referenced test scores were the only predictor variables shown to have a significant influence on self-concept after the first administration of the state exit exam. The multiple correlation coefficient between these two variables and total self-concept on posttest 1 was .666. The multiple correlation between these two variables and academic self-concept on posttest 1 was .761.

For the Year 2 sample of tenth graders, initial self-concept was the only predictor variable which was significant enough to be entered into the regression equation when total and academic self-concept on posttest 1 were successively used as dependent variables. The correlation between total self-concept before and immediately after the first administration of the exit exam was .775. The correlation between academic self-concept before and after the first administration of the exit exam was .714.

Question 3: Is it possible to identify critical factors which distinguish between passers and non-passers?

In order to address the third research question regarding the critical factors which distinguish passers from non-passers, a discriminant analysis was conducted. The independent variables were grade-point average, norm-referenced tests scores, and initial self-concept scores. The direct-entry method of analysis was used to derive equations

(two discriminant functions) that would use the independent variables to predict passing status on the GBST for the 191 students in the Year 2 sample for whom data were available.

Table 9 presents the results of the examination of the predictive value of three variables with respect to passing status on the state exit exam. The three variables utilized in this analysis were academic self-concept, grade point average (GPA), and normal curve equivalent (NCE). The minimum tolerance level estabished for the variables was .001.

TABLE 9

1985 BST GROUP MEMBERSHIP AS DETERMINED BY ACADEMIC SELF-CONCEPT, GPA, AND NCE

(N = 191)

Group	Actual Number of Members	Predicted Group Membership		
		Passed Neither	Passed One	Passed Both
Passed Neither	12	6	2	4
Passed One	19	0	0	19
Passed Both	160	2	0	158

Examination of the data via comparison of the coefficients indicates that the significant of the three independent variables in predicting 1985 passing status is on the GBST. As can be seen by reviewing the data in Table 9, 85.86 percent of the cases were correctly classified into groups through the discriminant procedure.

The predictive value of total self-concept, GPA, and NCE is reflected in the data in Table 10. Similar to what was found when the academic self-concept was entered into the equation, the total self-concept was the most significant of the three variables in this analysis (p=.01). Table 10 reveals that 86.39 percent of the students were correctly classified into groups via the discriminant procedure. Utilization of the total self-concept in the equation resulted in a .57 percent increase in predictive ability.

TABLE 10

1985 BST GROUP MEMBERSHIP AS DETERMINED BY TOTAL SELF-CONCEPT, GPA, AND NCE

(N = 191)

Group	Actual Number of Members	Predicted Group Membership		
		Passed Neither	Passed One	Passed Both
Passed Neither	12	7	1	4
Passed One	19	0	0	19
Passed Both	160	1	1	158

DISCUSSION

This study looks at the data for two random samples of tenth graders. The first sample (1983-84) was the second group of students required to pass the GBST in order to receive a high school diploma. The data analysis for this first group indicated a direct relationship between passing status and students self-concepts following the initial administration of the GBST. The findings from the initial group of tenth graders were not replicated with the second group of tenth graders (1984-85) except that a significant main effect was found in passing status. This significant main effect was found in passing status when the change in students' academic self-concept between posttest 1 and posttest 2 was used as a dependent variable. There was, however, a difference in the direction of the change for students who failed both skill areas. The significant increase in the change in academic self-concept for these students which was found in Year 1 was not found in Year 2.

It must be pointed out that by the time the second group of tenth graders were administered the GBST they had been exposed to several APS-initiated intervention programs. Programs which utilized the eighth grade GCRT results to identify areas in which students need remediation, GBST Preparatory Test which is used to identify students in need of special summer help, as well as particular curricular standards in

Language Arts during 1983-84 (this second group of students' ninth grade year), and now in Mathematics designed to impact on those skills assessed b the GBST. These interventions which have been successful in identifying students in need of help and providing them with help also resulted in their being a relative few students available for study as a group, following the second administration of the GBST. It is, however, still of importance that the impact of failing mandated that competency tests on student-self-concepts be examined, though the case study approach may have to be utilized. Further, it is suggested that such studies in districts on the verge of implementing MCT might provide a plethora of data. For example, 41 percent of the 146 students in Year 1 for whom self-concept scores on the pretest and posttest 1 were available failed either one or both skill areas. However, only 18 percent of the 204 students in Year 2 failed one or both skill areas. Thus, by Year 2, such a large percentage of the students sampled passed the exit exam on the first test administration that the issue of non-mastery was no longer appropriate for study through statistical analysis of group data.

The impact of failing mandated competency tests upon students' self-concept is one which warrants further study in situations where there is greater variance in the number of passers and non-passers. In systems wherein successful intervention has been implemented, it is suggested that the case study approach be utilized to gain further insights regarding the MCT and students' self-concept.

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